

NEW RECORDS OF MEXICAN *TACHINUS*
(COLEOPTERA: STAPHYLINIDAE)

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ABSTRACT

The male of *Tachinus inornatus* Sharp, a species previously known only from females, is described and illustrated from the state of Chiapas in Mexico. New distributional and habitat references are given for *Tachinus mexicanus* Campbell and *T. minor* Campbell. A key to all the known species of *Tachinus* from Mexico and Central America is included.

A number of specimens of *Tachinus* from Mexico, including males of a species previously known only from females, were recently sent for study by Dr. Alfred F. Newton, Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts. I am indebted to Dr. Newton for sending me the material and for allowing me to retain specimens of the species for the Canadian National Collection, Ottawa.

Tachinus mexicanus Campbell

Tachinus mexicanus Campbell, 1973, p. 74.

New localities: MEXICO: *Jalisco*: E. slope Nevada de Colima, 8000 ft., IX-21-22-1973 (AN, CNC) 13. *Michoacán*: Cerro de Garnica, Pto. Garnica, 9400 ft., IX-17-18-1973 (AN, CNC) 2.

These specimens were collected from leaf litter on the forest floor and from gilled mushrooms. They are the first records of the species from the states of Jalisco and Michoacán.

Tachinus minor Campbell

Tachinus minor Campbell, 1975, p. 90.

New localities: MEXICO: *Mexico*: 4 mi. SW Tenancingo, 7200 ft., IX-11-1973 (AN, CNC) 3; 3 mi. SW Temascaltepec, 6700 ft., IX-14-1973 (AN) 1; 7 mi. NE Temascaltepec, 7000 ft., IX-12-15-1973 (AN) 1.

These specimens were collected from leaf litter on the forest floor, from soft mushrooms and coral fungi, and from soft fungi-gilled mushrooms and *Clavaria*. *Tachinus minor* was previously recorded from southeastern Arizona and Durango; the records from the state of Mexico represent a considerable southern extension of its known range.

Tachinus inornatus Sharp

Tachinus inornatus Sharp, 1883, p. 310; Campbell, 1973, p. 83.

This species was previously known only from 2 females collected at San Geronimo, Guatemala. I assigned the species to a monobasic species group (1973, p. 82) based primarily on the absence of pruinose spots on the

abdomen. A series of specimens of this species collected from southern Mexico shows that the adults do have pruinose spots, but they are reduced and difficult to find unless the specimens are clean and well mounted. The discovery of the male of the species verifies the placement of the species in a group allied to the *Fimbriatus* group. The group is redefined as follows to include the additional variation and the characters of the male.

Redefinition of *Inornatus* group: Moderate in size, ranging in length from 4 to 5 1/2 mm. Surface of head and pronotum impunctate, with dense, coarse reticulate microsculpture. Maxillary palpus moderately long and slender; fourth segment 2 to 2 1/3 times longer than third segment. Antenna with segments 2 and 4 each distinctly shorter than segment 3. Abdomen with pruinose spots greatly reduced.

Male. Seventh sternite with apical margin moderately broadly, almost rectangularly emarginate, without rows of long spiniform setae; disc without rows of coarse granules along apical margin; disc evenly convex. Fifth and sixth sternites evenly convex. Eighth tergite with 4 short lobes.

Adults of this group may be distinguished by the greatly reduced pruinose spots of the abdominal tergites, by the lack of spiniform setae and only scattered granules on the male seventh sternite and by the almost rectangular emargination of the male seventh sternite.

Tachinus inornatus is redescribed as follows to include the additional variation and the characters of the male.

Description of *T. inornatus*: Dark brunneous; sides and base of pronotum, mouthparts, and legs testaceous. Body narrowly elongate oval with sides of abdomen gradually and evenly narrowed from base to apex. Length 4.2-5.5 mm.

Head, pronotum, and elytra with microsculpture consisting of small, coarse, slightly transverse, pentagonal cells; head and pronotum with punctation obscured by microsculpture; elytra with surface moderately finely, sparsely punctate. Head retracted into prothorax to level of posterior margin of eyes; eyes large, strongly convex; ocular seta lacking. Maxillary palpus long and slender; segment 4 with sides sub-parallel, 2 1/3 times longer than segment 3. Antenna with basal 2 segments lacking fine pubescence, segments 3 and 4 moderately densely pubescent, segments 5-11 very densely pubescent; ratio of lengths of segments as follows: 20:-12: 19: 13: 15: 15: 15: 15: 15: 15: 23; segment 5 elongate ($l/w = 15/11$), following segments gradually becoming broader approaching apex, segment 10 quadrate.

Pronotum 0.6 times as long as wide; apical margin broadly and shallowly emarginate; base truncate or slightly convex; sides broadly and evenly convex from base to apex, widest at basal third to fourth. Elytra, along suture, 1.2 times longer than pronotum at midline.

Abdomen with surface moderately coarsely, densely punctate; microsculpture dense, consisting of fine striae radiating from punctation; median pruinose spots of third and fourth tergites greatly reduced, visible only with high magnification and oblique lighting. Anterior tibiae slightly widened approaching apex, subequal in length to anterior femora.

Male. Protarsi slightly widened. Seventh sternite (Fig. 1) with disc evenly convex; apical margin broadly, almost rectangularly emarginate; without long, spiniform setae; disc with a few scattered, fine granules near sides of emargination. Eighth sternite as in figure 1. Eighth tergite (Fig. 2)

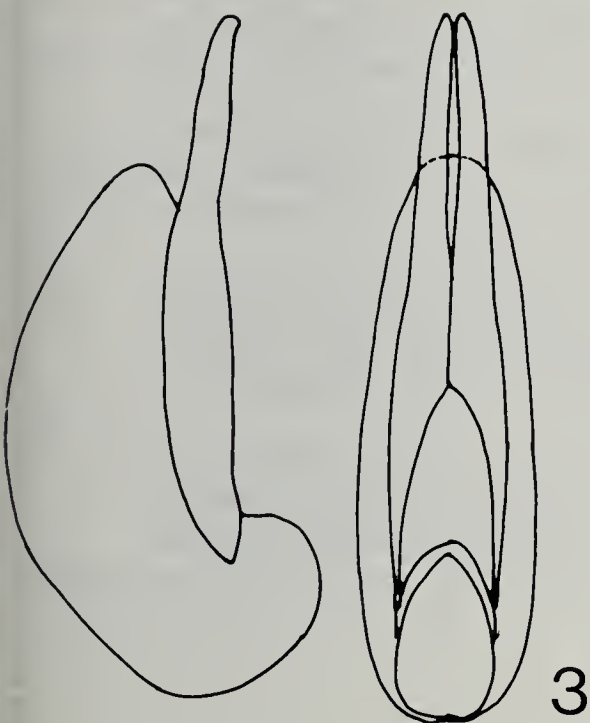
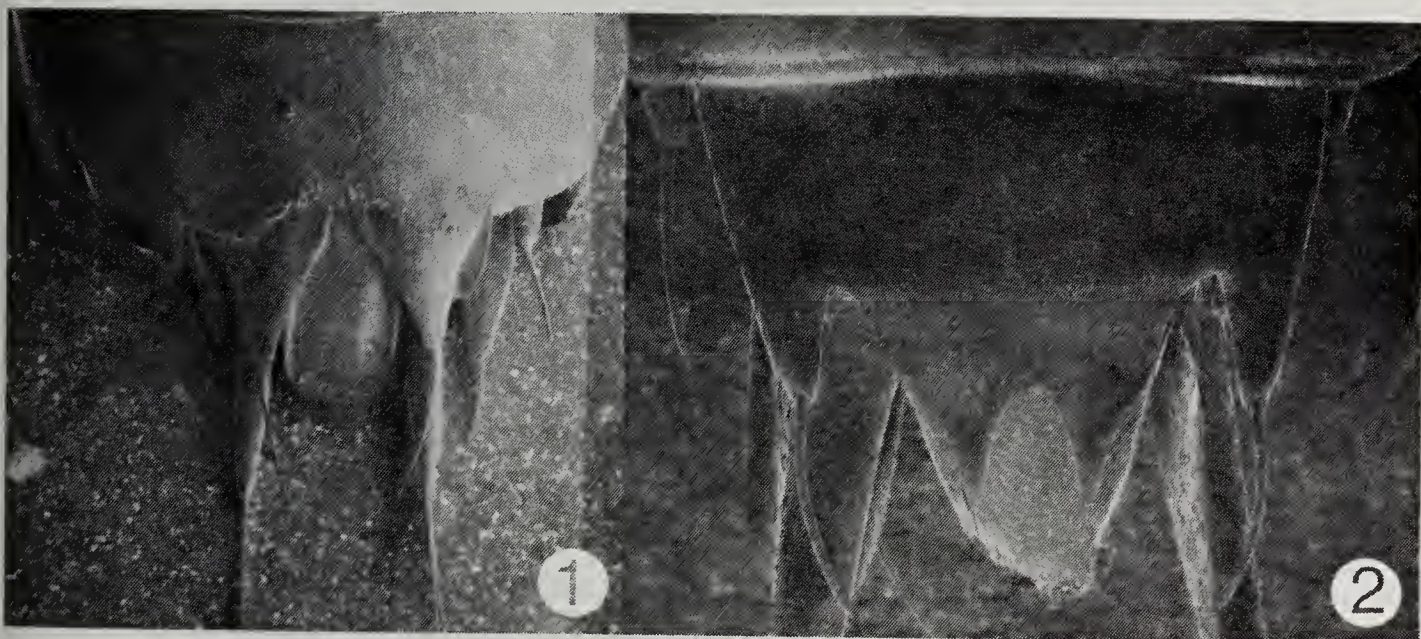
with 4 lobes; median lobes separated by a moderately broad, deep, U-shaped emargination; apex of each median lobe with a short seta, apex of each lateral lobe with a long macroseta. Genitalia (Fig. 3) with median lobe short and broad, much wider than lateral lobes; lateral lobes moderately long, narrow, with sides straight, gradually and evenly narrowed from base to apex; apices narrowly rounded; viewed laterally, lateral lobes slightly bent ventrally near middle, apices slightly hooked.

Female. See Campbell, 1973, p. 83.

New localities: MEXICO: *Chiapas*: 8 mi. N. Pueblo Nuevo, Solistahuacán, 6000 ft., VIII-26-27-1973 (AN, CNC) 6; 3 mi N. San Cristobal, V-29-1969 (CNC) 1; 10 mi. NE San Cristobal, V-22-1969 (CNC) 1; near Tenejapa, 8 mi. NE San Cristobal, V-18-1969 (CNC) 1.

These specimens were collected from leaf litter on the forest floor, from soft, white, polypore combs, by sifting leaf litter along a small stream, and from mushrooms on the side of a log. These are the first records of this species from Mexico.

In the following keys, the figure numbers printed in bold faced type refer to those published in my 1973 revision.



Figs. 1-3, *Tachinus inornatus* Sharp, male: 1, ventral view of apex of abdomen; 2, dorsal view of apex of abdomen; 3, genitalia (left, lateral view; right, ventral view).

KEY TO MEXICAN AND CENTRAL AMERICAN SPECIES OF *Tachinus*

Males

1. Apical margin of seventh sternite with a partial row of fringing, spiniform setae (**Fig. 81**)..... *T. oaxacensis* Campbell
- 1'. Apical margin of seventh sternite lacking rows of spiniform setae 2
- 2(1'). Surface of pronotum and elytra strongly shining, without microsculpture *T. minor* Campbell
- 2'. Surface of pronotum and elytra with distinct striate or reticulate microsculpture 3
- 3(2'). Pruinosc spots of abdomen greatly reduced (visible only with magnification of approximately 100X); microsculpture of pronotum reticulate..... *T. inornatus* Sharp
- 3'. Pruinosc spots of abdomen visible with low magnification (10X); microsculpture of pronotum transversely striate 4
- 4(3'). Seventh sternite (**Fig. 54**) deeply, rather narrowly emarginate, with 3 patches of granules, one at base and one on each side of emargination; known only from Panama.....
..... *T. meridionalis* Sharp
- 4'. Seventh sternite (**Figs. 53, 78**) more broadly and shallowly emarginate, with one band of granules on disc adjacent to emargination; known from Mexico and Guatemala 5
- 5(4'). Coarse granules of seventh sternite (**Fig. 53**) restricted to a single row along apical margin; lateral lobes of male genitalia (**Fig. 127**) strongly hooked apically *T. alticola* Sharp
- 5'. Coarse granules of seventh sternite (**Fig. 78**) denser, arranged in a zone adjacent to apical margin; lateral lobes of male genitalia (**Fig. 126**) deflexed apically..... *T. mexicanus* Campbell

Females

6. Pruinosc spots of abdomen greatly reduced (visible only with magnification of approximately 100X); microsculpture of pronotum reticulate..... *T. inornatus* Sharp
- 6'. Pruinosc spots of abdomen visible with low magnification (10X); microsculpture of pronotum absent or transversely striate ... 7
- 7(6'). Surface of pronotum and elytra strongly shining, without microsculpture *T. minor* Campbell
- 7'. Surface of pronotum and elytra with distinct transversely striate microsculpture 8
- 8(7'). Emargination of median lobe of eighth tergite reaching to base of lobe (**Figs. 28a, 47a, 49a**); emargination between fimbriate lobes of eighth sternite evenly convex at base (**Figs. 28b, 47b, 49b**) 9
- 8'. Emargination of median lobe of eighth tergite (**Fig. 25a**) shallower, not reaching to base of lobe; emargination between fimbriate lobes of eighth sternite with a distinct tooth at base (**Fig. 25b**)..... *T. mexicanus* Campbell

- 9(8). Pronotum and elytra flavous with a large, triangular, piceous area extending from apical angles of pronotum to apex of elytral suture; known only from Panama *T. meridionalis* Sharp
- 9'. Pronotum and elytra brunneous to black; frequently with some or all of pronotal and elytral margins paler, but without a large, distinct, triangular piceous area; known from Mexico and Guatemala 10
- 10(9'). Elytra with punctures coarse and deeply impressed, separated by average distance distinctly less than diameter of a puncture; surface between punctures smooth and strongly shining with microsculpture almost completely obsolete.....
..... *T. oaxacensis* Campbell
- 10'. Elytra with punctures moderately finely and shallowly impressed, separated by average distance approximately equal to diameter of a puncture; surface between punctures slightly shining with distinct microsculpture *T. alticola* Sharp

REFERENCES CITED

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- SHARP, D. 1883-1887. (1883) Staphylinidae. In W. Junk (Ed.), Coleopterorum Cat. Part 130:1501-1881.

